

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

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THIS publication is the successor of the late **AMERICAN FARMER**,

and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, MARCH 22, 1836.

The letter of our esteemed correspondent, John Smith, Esq., of Dardenne, Missouri, is full of interest, and written with his usual good sense, close observation, and strong discriminating powers of mind.

The advice of our correspondent, "*A Subscriber*," will be found excellent, and may be practiced upon with decided advantage by most men in all the avocations of life.

Those of our subscribers who have written to us concerning the *Virginia Corn Crusher and Grinder*, as well as our readers generally, are referred to the advertisement of Mr. James Moore, which will be found under the proper head.

RAIL ROAD FROM BOSTON TO NEW ORLEANS.

We were hard at work some days since, when an old and esteemed friend came into our office and from certain outward signs and the inventive turn of his mind, we were certain that he had some new and useful plan, to husband time and overcome space, to shew us; and we were not disappointed; for it was no less than a draught of a rail road to be located between the points designated at the head of this article, on which he proposes to carry the United States mail, and to transport it from the one place to the other in *two days*. Only think of it, 1700 miles in two days! Why, we ejaculated, "a man might as well be shot out of a Columbiad, as to be propelled along at this rate." The very thought of such velocity, at its first conception made the blood curdle and move along our veins with a chilly sensation; but when we came to set down coolly and make a calculation with our friend, it did not appear to be any great scare-crow after all. From Boston to New Orleans is about 1700 miles, so that it would be but 35 miles an hour, which is not half the speed according to Mr.

Gurney's estimate of the velocity to which travel on rail roads is susceptible of being safely carried, when the cars are propelled by a steam-engine of proper power.

The *tracks* themselves, as represented in the drawing, appeared to us to be so carefully guarded, as to render it impossible for the cars to run off under any contingency that might occur, which circumstance, besides making passengers feel comfortable, will, we should think, win golden opinions for our friend's trackway, and we should not be surprised, although we have passed the prime of manhood, at seeing the mail carried from Boston to New Orleans in the time herein named, or even in a less number of hours.

AMERICAN SEWING SILK.

We were shewn some days since *four* parcels of sewing silk made by a lady residing near Gettysburg, Pennsylvania. The worms were fed on four varieties of the mulberry as will be hereafter explained, and the cocoons reeled on a common reel. The several samples are bound round by different colored thread so as to point out the particular kinds of mulberry on the leaves of which the worms were respectively fed. The letter says:

"That bunch with the *white thread* was raised from the *white mulberry*; the bunch with the *black thread* was raised or fed on our common black mulberry; the bunch with *red thread* around it from the wild red mulberry, and that tied with the *green*, is of a kind found in our woods, with a much larger and thicker leaf, and the lady who fed the worms and made the silk, says the worms will consume the whole leaf, stems and all."

All of those samples of silk are beautiful and highly creditable to the patriotism, industry and skill of the lady by whom they were manufactured. Each is as lustrous as the imported silk, and although the twisting is not as well done, yet the elaboration of the thread is unusually perfect and evenly drawn out. All of them would compare with the foreign article in glossiness, and in that delicately rich hue which silk made from healthy worms invariably has. The last parcel made, however, was boiled beyond the proper point, and notwithstanding it still retains all the brilliancy peculiar to silk, it has lost that proper-

ty of communicating to the nerves of the fingers the sensation which is imparted to them on the taking up of a pinch of the flower of sulphur, a thing which, if observed, will serve as an excellent criterion to test when the commodity has been long enough boiled.

From the tenor of the letter we have quoted, it would seem that the writer is of opinion that the whole of the respective varieties of the mulberry with which these worms were fed, are native, a mistake which he might very readily fall into from the circumstance of their all being found growing wild, but there are but one kind which has as yet been ascertained to be native with us, and that is the *Morus Rubra*, a tree of very considerable altitude, reaching sometimes the height of forty feet. Its fruit is of excellent flavor and of a deep red colour, hardy and competent to resist our frosts. As a fruit it is decidedly preferable to the *black*, being infinitely more imbued with that rich mellow, sub-acid taste which is at once so pleasant and grateful to the palate.

We have acclimated among us, and it is often found growing in our forests far from the homesteads of civilized man, the *Morus Nigra*, a native of Asia Minor, also a robust and hardy tree, bearing a fruit delightfully aromatic, and well charged with a sub-acid liquid, which when submitted to vinous fermentation, makes a very palatable wine.

The *Morus Alba*, or White Italian Mulberry, is often found in our densest forests, struggling against the legitimate lords of the land, but they are the offspring of accident, or perhaps the nurslings of some member of the feathered tribe, which, in gorging its appetite had taxed the stomach beyond its healthful action, so that, to the imperfect state of its digestive organs we are indebted often for the propagation, in places unexpected and unlooked for, of vegetable productions not "native here." To this cause we are, no doubt, also to ascribe the several varieties of mulberries spoken of in the present instance.—And, indeed, there are varieties of the *Morus Alba*, or White Mulberry, which, if we were to judge of the tree by its fruit, would confound our understanding, and lead the mind to an erroneous result, for the berries, which are a very meagre apology for fruit, may indiscriminately be found white, red, and, indeed, sometimes present the anomaly of a party coloured fruit.

There is also the China or paper mulberry, known to Botanists as the *Morus Papyrus* or *Broussonetia Papyrifera*. This tree takes its cognomen from the fact of paper being made from it in China. It too, bears a berry, round and singular in its appearance, and not very inviting to the human taste. Its foliage is as many shaped as *Proteus* himself. But for all the purposes of food, the leaf is utterly worthless. As a shade tree it is valued by many in consequence of its leaves being wholly exempt from all insect-visitations.—Those voracious little creatures that annually destroy the foliage of the lofty elm, would as soon undertake to demolish an Elephant as to trust themselves within the rough and shaggy coating of the leaf of this tree.

Again, we have the *Dandolo* or *Moretti Mulberry*, a new variety which has the reputation of affording excellent nourishment for silk worms. It bears a fruit, which, when perfectly ripe is black. The leaf is eight or ten inches long and nearly as wide.

And "last, though not least," comes the "no-blest of them all," the *Morus Multicaulis*, or many stalked Mulberry. This is a shrub of some 8 feet high, with a leaf as large as a dinner plate, perfectly free from all coarse fibres, a circumstance which gives it an advantage over every other kind as food for the silk worm, as they consume the whole leaf.

Those who are desirous of engaging in the culture of the Mulberry, should not fail to sow the seed of the *Morus Alba*, (the Italian White Mulberry,) this spring, and they should recollect that the sooner they do so after the frost is out of the earth the better. We do not hesitate to recommend the culture of this variety of the Mulberry to all persons; for if there were no other reason, the single fact of its foliage vegetating fully two weeks before that of the *Morus Multicaulis* should be conclusive. The superior economy in the gathering and feeding of the leaf of the latter kind, must always place it far in advance of all the other sorts; but still the advantage of having its foliage available so much earlier, must render it very desirable to farmers to cultivate a portion of their lands in the white Italian Mulberry; for while it will thus be in readiness to meet such demand, it will serve also for any other contingency that may occur.

Wherever ground may be an object, the white Italian Mulberry may be planted in hedges, to serve as *division fences*; and it here may be proper to remark, that after a few years protection from cattle, their subsequent browsing upon its foliage

will be rather a benefit than an injury. Of its making a good and impenetrable hedge, one that will turn horses, cattle and hogs, there is not the least question, nor is it more questionable, that it will make one far more durable than either of the thorns now used. If then the division fences on one's farm, can be turned to so profitable an account, as the feeding of silk worms, in addition to its office of protecting the crops growing in the field, should any one owning a farm hesitate a moment in placing himself in a situation at once so eligible and lucrative?

In order to facilitate the operations of those who may have mislaid or forgotten the directions given last summer, we will repeat them now, and take this occasion to call attention to them:

DIRECTIONS

For sowing the seed and raising the plants of the White Italian Mulberry Tree.

1. To sow an ounce of seed, prepare a bed 50 feet long and 4 feet broad. Manure it well with a compost composed of 1-3d stable manure, 1-3d ashes, and 1-3d decomposed leaves from the woods, or garden mould; dig deep, pulverise finely, and then lay the beds off in drills 12 inches apart, $\frac{1}{4}$ or $\frac{1}{2}$ of an inch deep; sow the seed as thick as your onion or parsnips; cover with rich mould, press the mould down gently, but sufficiently to cause the seed to come into contact with the earth; and should the weather be dry, water the seed bed every other evening, it will assist in promoting the germination of the seed and vigorous growth of the plant.

2. Keep the beds clean of weeds; and give an occasional watering with suds or soot and water, say once a week after they are up.

3. The second year, if not removed before, the plants must be removed into the nursery rows, which must be prepared as for any other crop. The ragged roots being taken off and the tap root shortened, the plants must be planted out 12 inches apart in rows three feet apart, the earth to be well trodden around the plant. As before, the earth must be kept open and free from weeds.

4. At two years old, the plants may be planted out into hedges, at 18 inches apart in rows six feet wide. The ground should be prepared as before directed, and some good rich mould put into the holes, to be pressed around the plant. If intended to be planted out as standard trees, 20 feet square apart would be a good distance; but in that case the plants should not be transplanted until they are about an inch in diameter. In either case they will require trimming and topping, and if kept as hedges should be treated as other hedges are.

[For the Farmer and Gardener.]

"Little things are great to little men"—little attentions necessary to secure important results.

Mr. Roberts—The aphorism of our caption will appear evidently applicable to most affairs of human life. But the particular application designed, at present, is to the concerns of the vege-

table kingdom, and to that part of its economy pertaining to transplanting trees and vines.

The ordinary process of doing this is presumed to be known. But they often die or are lost after the trouble of transplanting, for the want of some preparatory process. Those taken immediately from the nursery, and transplanted at once into holes previously prepared, generally grow without fail. But as it regards those carried a distance, or out of ground some time, the proverb of the fatal effects of a fish too long out of water, frequently applies,—and often applies too after due care of boxing and the like has been taken. One little attention I would suggest in this case, is to soak the roots of trees and vines, a due time, before transplanting. The manner of doing this, the writer will illustrate by an example in his own practice. Owing to an unlooked for delay, a box of grape vines and trees coming three hundred miles, did not reach him till late in the season, when most vegetation had put forth. Moreover their roots appeared dry and sapless. Recollecting that in a like case once before, he had lost all, it appeared almost hopeless to plant them. But he resolved, at length, to try the efficacy of a method found detailed in a letter from a friend. He, therefore, took these down to a branch or run, covered their roots in the mud—dammed up the water so as nearly to cover the whole plant, and let them so remain some days, or till the buds had swelled considerably, and then planted without losing any.

To conclude, I would remark, that, some farmers, otherwise careful, are in the habit of neglecting matters they deem little, for the alleged reason of attending well to their great concerns, or main objects of cultivation. But it should be remembered that comparatively little concerns help to compose or make up the entire or great prosperity of a farming establishment; and that, although attention to fruit trees, grape vines, gardens, and the like, or those matters quite important to the comforts of a family, must be given for success, according to the maxim—"what is worth doing at all, is worth doing well,"—yet, comparatively little time and cost is required. The neglect consists in omitting a few hours work in the critical time to the garden, vineyard, or orchard, which if promptly bestowed, would eventually save to the cultivator, the worth of many hours, or even days work, bestowed on cotton, or corn, or some great staple of the plantation.

There is another, and we consider a great evil, often growing out of these little neglects; in that of suppressing the spirit of agricultural enterprise and improvement. For instance, some choice plant, vine, or fruit tree is recommended and forthwith purchased by some farmer, too full of great cares to attend to little ones, in detail. It is planted, and the same attention and time bestowed upon it, perhaps, as upon a cotton or corn stalk, would have caused it to flourish to full expectation. But grass and weeds are suffered to be constant neighbors to it in the growing season; and it is afterwards reported to be worthless, and to have been puffed up by the vender, merely to make money. To guard against this evil, as to trees and vines, I would recommend that the ground, where growing, be cultivated a

due number of years, with some valuable crop of such kind as not to shade too much, nor to stand too near the individual plants.

A SUBSCRIBER.

[Communicated for the Farmer & Gardener.]

Dardenne, P. O. Missouri, Feb. 22, 1836.

Mr. Editor—Enclosed I send you another specimen of the chinch bug in compliance with your request. I searched in vain for living specimens in the same localities where I procured the other parcel; I could find there, only the inanimate remains or skeletons of the animal, which at Christmas, was so sprightly and animate, when brought into the temperature of my family room. But after a tedious search, I at length succeeded in finding a few individuals in perfectly good condition, these together with a considerable number of dry skeletons are put up and forwarded to you as before. I ask pardon of you and of the readers of your journal, for having in my first communication on the subject of this insect, treated the subject in so vague and loose a manner, and my only apology for doing so is this: I had seen so many notices of the ravages of an insect called by the same name, published in agricultural papers, and even transferred to many of the political and commercial periodicals within the last four or five years past, that I had supposed this or at least some small insect, under the same cognomen, was generally known throughout your region of country; it is proper to observe, however, that so far as my information goes, its location was confined to the State of Virginia. I am not certain, however, that this last is identical with the insect known here by the same name, as I well recollect to have seen some notice of the red insect passing from the wheat field in shoals on the wing. Now I have never been able to detect our Missouri chinch bug on the wing, although I have observed its habits and movements pretty closely; it changes its locality by creeping, so far as I have observed, which it performs with apparent ease and expedition: it propagates throughout the feeding season, which is in ordinary seasons, from the middle of June until the frosts set in in the fall; it deposits its ova between the foot stalk and the stem of the wheat, oats, corn, and grasses of the same general structure, and they are probably hatched by the warmth of the already mature individuals, which congregate thickly in these situations, particularly if the weather be a little cooler than usual. I am of opinion, that it does not survive the winter in the egg state, as I cannot observe any thing like eggs in their winter quarters—but of this I am not positive. The living insects I found, were laid up in a stack of corn that was cut up at the ground, in the fore part of October, and has stood in the field undisturbed since.

There is no prospect of exterminating this insect by subjecting the seed wheat to any sort of process: it never ascends to the head of the wheat plant according to my observation. I however incline to the opinion, that by making a radical change in our mode of cultivating wheat, we might avoid the ravages of this insect in a great measure. The mass of the wheat made here is put on oats fallow, where many of the insects are to be found, and where they no doubt, remain in the shelter of the stubble, and other trash

left on the ground, and are there ready to commence the work of procreation as soon as circumstances render such measure proper. By substituting naked fallow for the oats fallow, we shall avoid in a great measure, if not entirely, the ravages of this insect; this system of farming I would not adopt of choice; but of evils, I am disposed to select the lesser. Be pleased to tender my thanks to G. B. Smith, Esq. for his promptness in examining and describing the former specimen of this insect, which I forwarded to you. With all due deference to that gentleman's superior acquaintance with natural history, I am bound to say, that he has pronounced a hasty and ill advised sentence of condemnation on the vulgar cognomen of this insect: it emits a strong pungent and offensive odor, not altogether unlike that which is emitted by the bed bug, and from which odor it has derived its name, therefore, according to one of the senses, at least, it bears a much nearer resemblance to the *chinch* than it does to the June bug.

Lest you and your readers should be led into error by my remarks on the cultivation of clover in my former communication, I will remark here, that I am far, very far from treating all my clover land in the same way as the piece then mentioned was treated: on the contrary I am cultivating clover extensively for the double purpose of forage and as a renovator of the soil. I do not, however, plough under so soon as you eastern people do, but let it stand some four or five years, and I think with advantage, taking the relative cost of labor, seed, and the price of their products into consideration. I laid down one of my principal fields to grass in the spring of 1830, cut four crops of hay from it, and last spring hauled out all the manure on the farm, spread it, and ploughed under the manure and the crop of grass, then from six to nine inches high, ploughed as deep as I could with 3 yokes of good steers, laid the furrow flat and smooth with a long barshare plough, then harrowed with the furrow, (rolling being unnecessary from the smoothness of the ploughing) then marked with a long sharp heavy plough, at 4 feet 3 inches across the furrow, taking especial care not to disturb the sod; then planted it by stakes at 4 feet across the marks, in corn on the sod; on the 10th of June, the corn came up admirably well, and when about a foot or 15 inches high, harrowed it effectually across the furrow with a heavy two horse harrow, the centre teeth being extracted and the horses driven on each side of the row, having long stretchers to the harrow, and a stick tied to the bit of the off side horse, and attached by its other end to the harness of the leading horse, to keep the horses apart from the corn: afterwards, the surface was scarified between the rows twice, that is once each way, and although from the peculiarity of the season the crop did not mature, it was doubtless the largest product that I have ever seen, although I have been accustomed from my infancy to the enormous products of the western country, when in its pristine vigor, including the choicest lands of old Kentucky. Yours, respectfully,

JOHN SMITH.

The readers of the Farmer and Gardener, are respectfully referred to the advertisement of the great sale of stock, &c., by John Barney, Esq., formerly of Port Penn, Delaware.

We particularly call the attention of agriculturists to that part of Professor Ducatel's report published to-day. It shows very clearly that oyster shell lime as a manure, is nearly as effective as the very best alum stone lime, and superior to much of the article offered for sale.—This is a most important fact, and gives immense value to the inexhaustible calcareous deposits, recently discovered in the states of Maryland, Virginia, and North Carolina.

PROFESSOR DUCATEL'S REPORT.

(Continued.)

SECT. II. *Agricultural resources of the lower counties on the Eastern Shore of Maryland.*

The agricultural improvements of Dorchester, Somerset, and Worcester counties, fall far short of what they might be made to attain, by a better system of cultivation, and a more liberal employment of the resources which this section of the state possesses. But to effect a thorough improvement, the attention should be first directed to the congeniality of the soil, in each district, for that species of growth from which a crop is expected. Corn and wheat are the staple commodities of the Eastern Shore, but in the present condition of things, the latter is so precarious a resource, that corn may be said to be the principal produce and main dependence of the lower counties. But yet their various soils are capable of producing a number of other crops: rye, oats, beans, potatoes, (common and sweet,) and the root crops generally. But it is not only in limiting the variety of their crops, that the agriculturists of this section of country err; they neglect to take in account the peculiar susceptibilities of the various kinds of soil, to produce certain crops in preference to others; and thus an injudicious system of husbandry is followed, resulting most frequently in disappointment. On some of the light soils described as belonging to the upper portions of these counties, wheat cannot be raised, whilst the same soils may be made to yield profitable returns of corn, rye, and oats; it is therefore worse than useless to attempt to raise wheat upon such lands. The opinion that oats exhaust the soil, is an unfounded prejudice; for any system of rotation, with proper management, appears to be beneficial. Those parts, on the other hand, that possess a clay soil, with variable proportions of sand, admit of alternate extraction from them, of corn and wheat crops, provided they be followed up by the clover, cut and turned in with lime; or if grazed not too closely.

Another popular belief, founded upon prejudice, is, that plaster will not act upon lands contiguous to salt water. It is not so. Lands, whether near or remote from the sea, upon which gypsum did not seem to take kindly, have been found, after being marled or limed, to derive the useful benefits imparted by this valuable material.

In some parts of Somerset, a small portion it is true, as yet, the crop of sweet potatoes is the main one, and is found very profitable, as is evident by the thriving condition of the small farms on big and little Dee's island; whilst intelligent farmers, in other parts of the country, have

turned their attention advantageously to the cultivation of beans, peas, &c. But there is yet another growth that bids fair to become of great value to the agricultural interest of the Eastern Shore of Maryland, namely, the *palma christi*, or castor bean plant, sometimes known by the name of *mole plant*.

An attempt was made in the report of last year, to excite the interest of the farmers of Queen Anne and Caroline counties, in behalf of this new crop. It is to be regretted that they have not extensively, if at all, availed themselves of the suggestions—the bean having increased in value far beyond the most sanguine anticipations. There ought to be, therefore, no further delay to the introduction of this growth, as one of the staple commodities of Maryland. Without having been as yet able to ascertain the precise cause of the extraordinary demand for this article, within a year, there is still reason to believe that the call for it will continue to be great; since, notwithstanding its extended cultivation in consequence of the high prices obtained in preceding years, it now commands a higher price than at any other former period. It has been stated that the oil expressed from the beans is employed in large quantity in the manufactories of England for greasing the machinery by which these establishments are put into operation.

The culture of the *palma christi* presents no difficulties. It is said to thrive best in good corn lands, yielding, according to the quality of the soil, from twenty-five to forty bushels per acre. The land requires the same preparation as for corn, and the bean is planted like this grain,—in hills on which two or three plants are suffered to grow; the subsequent tillage being also the same as that practised for corn. The most tedious part of the management of this crop is the gathering of the fruit, which forms a cluster with a pyramidal termination; the lower portion being occupied by the male flowers, that yield no seed, and the upper by the female flowers; the ovary, which is roundish and three-sided, supports three linear reddish stigmas, forked at their apex. The fruit, properly speaking, is a round capsule, with three projecting sides, covered with rough spines, and divided into three cells, each containing one seed. The flowers appear in July, and the seed ripens throughout August and September. If suffered to do so on the plant, the capsule bursts with considerable force, projecting the seed at a distance, and scattering it about the field. To avoid this is the only extra attention required by this growth, and this is done by anticipating the maturity of the fruit. The directions are,—to visit the plantation a little before the commencement of the ripening season, removing those clusters that approach to maturity, (which is known by a change of color, from grayish green to a light pea green,) and conveying them to the drying ground, where, by the effect of the sun's heat, they burst, and dislodge their seeds. The only preparation for the drying ground is to provide a small place, cleaned and levelled as for a threshing floor, upon which the clusters are scattered. It would be advisable to locate this spot in the neighborhood of the barn, or near a shed, so as to facilitate the removal of the plants in case of protracted wet weather, to some shel-

tered situation. Transient showers of rain do not, however, damage it, otherwise than by blackening the seed, whereby its sale might be injured, although it does not diminish its productiveness in oil. The occupation of gathering having once commenced, it should be so arranged as to visit each plant twice a week, morning, and evening, until the whole crop has been secured. It may then be sent to a market, where, at the time of writing this Report, it commands three dollars a bushel; or, it may be made to yield its oil by the following process, as practised in Northampton county, Virginia.

The seeds are first to be thoroughly cleaned of dust, and of portions of the capsules that may have adhered to them. They are then introduced into shallow iron drawers, arranged on both sides of a furnace, where they are exposed to a gentle heat; the object of this first operation being to render the oil more easy of expression. From these drawers they are conveyed into a powerful screw-press, by the operation of which the oil is obtained. So far, however, the oil is impure: it must now, therefore, be transferred to clean iron boilers, previously supplied with water. As the boiling proceeds, the impurities that rise to the surface are skimmed off, and the clear purified oil finally makes its appearance, floating on the water. It is now carefully removed, and a second time subjected to the boiling process, with a very small quantity of water, until the latter liquid has been entirely dissipated. This is ascertained by taking out a small portion into a vial, and observing whether it preserves its transparency as it cools. Some care is required not to push the heat too far, as then the oil would acquire a brownish hue and a hot peppery taste, which would at all events unfit it for use as a medicine. One bushel of seeds yields about one gallon and three-quarters of oil, at an expense of about 25 cents a bushel, which is refunded by the sale of the *pumice*, found to be an excellent manure for corn crops. Acknowledgments are due to Mr. Smith, of Northampton county, Va. an intelligent and experienced planter of *palma christi*, and manufacturer of castor oil, in the vicinity of Eastville, for the information contained in the above paragraphs.

It is needless, after what has just been said, to expatiate upon the value of this plant. That the soil and climate of at least the lower portions of the Eastern Shore of Maryland, are congenial to its growth, cannot be doubted. The praiseworthy example (crowned, it is believed, with entire success) has already been set to the inhabitants of Somerset, by one of the most intelligent farmers of the county—Col. Arnold E. Jones.

Persons well acquainted with the cultivation of rice confidently assert and believe, that there are many spots on the Eastern Shore of Maryland, well calculated to the production of this important agricultural commodity. Rice has been raised in Maryland, in the vicinity of Salisbury, at the head of the Wicomico, and a promising attempt, the result of which has not been ascertained, was recently being made opposite Vienna, on the Nanticoke. It would seem desirable to encourage such attempts, as further conducive to the practical illustration of the possibility of reclaiming a vast body of lands at present of little value.—These are the marshes and cripples that occur on

the margin of the large rivers on the Eastern Shore of Maryland. An examination of the actual condition of these marshes justifies the belief that they might, to a certain extent, be drained; whether sufficiently to be made permanently arable, or only to the extent of serving as more firm and safe pasturages, remains to be tried. It is thought that the single operation, though one not unattended with difficulties, of diverting a part of the course of the river so as to cause it to pass between the marsh and the main land, would greatly contribute to their drainage. This appears from the fact, that their most elevated parts are those contiguous to the river, inclining moderately towards the firm land, adjoining which the marsh is always found to be the softest, and more liable to a total submersion. By insulating these bodies of land, always more or less miry, and thus establishing a drainage around them, it is possible they might eventually acquire sufficient consistence, without having recourse to embankments, to afford safe and valuable pasture grounds. The cripples seem irreclaimable by any other means than by embankments,—an operation deemed practicable by those who have given much attention to the subject, and who represent them as best fitted for the cultivation of rice.

Such are the agricultural resources of the lower counties of the Eastern Shore of Maryland, so far as the productiveness of the soil, and its susceptibility of improvement are concerned. It has already been stated, that the only incidental resource possessed by this section of country, is to be derived from the facilities of obtaining calcareous matter (in which the soil is essentially deficient) from the shell banks, oyster banks, and other sources already referred to. But before any hope can be indulged, that the inhabitants of this portion of the State will avail themselves of these means of bringing their lands into a higher state of cultivation than they seem to have any idea that they are capable of, it is necessary to remove a fatal impression, too generally made, that the lime derived from shells is of but little value.—The result of the inquiries made to disprove this opinion, will be given in the next section of this report.

An error equally fatal prevails among the citizens of Maryland, in reference to the counties that have just been passed in review,—that they are as devoid of interest as they have been believed to be of resources. It is hoped that the minute, and, at the same time, faithful account given of them—more minute than would otherwise have seemed necessary—will have a tendency to rectify the false judgment so commonly passed upon this portion of our territory, and contribute likewise to cheer those of its inhabitants who have become disheartened at the present aspect of things, and who are too prone to believe that their industry could be better rewarded at a distance. Industry meets with its just reward every where; but the assertion is safely ventured, that the same amount of enterprise at home, would secure more comfort and happiness, than, under any circumstances, can be expected in a newly settled country, where all that is obtained is at the cost of solid enjoyments. The adventurous merchant and speculator may find a wide field in the "Far West" to satiate, if possible, his thirst for wealth; but the industrious farmer, on the tide waters of

the Chesapeake, needs no better patrimony than that which he already possesses. A soil easily cultivated, and very improvable, having the means of improvement at hand; the necessities, and even luxuries of life in abundance; a temperate and healthy climate; a free and constant intercourse with a large commercial emporium, by means of a water communication reaching to the very door of his granaries; surrounded moreover by intelligent neighbors, and a peaceful and orderly population—such are the advantages of which he can boast, as a set-off against those of any other section of our country. It is full time that he should learn to appreciate them himself.

SEC. III. On the comparative value of shell lime and stone lime.

The opinion seems to prevail among Maryland farmers of all grades, that the lime obtained by the burning of oyster, or other marine shells, is very far inferior for agricultural purposes to that procured from limestone. Hence some have been induced to give the preference to an article sold as lime, and offered at reduced prices, over a much purer, and even cheaper lime, because obtained from oyster shells; whilst others, beyond the reach of stone lime, and having abundant facilities for procuring shell lime, have neglected the latter altogether as almost worthless. It becomes necessary, therefore, to rectify public opinion as to the precise relative value of the two substances—at least for agricultural purposes. In the absence of direct experiments attention must be turned to the identity in nature, or the difference existing between them, and the conclusion drawn from the general principle, that bodies similarly constituted will, under the same circumstances, produce analogous effects.

In the first place, then, it will be admitted, that lime (by which the chemist understands a definite and invariable compound) is the same, from whatever source it may be derived; but the lime of commerce is an indefinite and a variable article. The sources whence the latter is usually procured for economical purposes, are, where it occurs in combination with a gas, called the carbonic acid gas; because it is found that by the simple application of heat, this gaseous body may be dissipated, leaving the lime, either perfectly pure, or charged with such impurities as the material employed originally contained. The purer the material then, the purer will be the lime.—Now the purest of all the compounds of carbonic acid and lime, is that substance called by mineralogists *calcareous spar*, and the variety of lime stone, that approaches this the nearest, is the *alum limestone*. Supposing this to be a perfectly pure carbonate of lime, it has been ascertained that the carbonic acid exists in it in the proportion of 22 to 28 of lime, or 44 to 56; so that every 100 pounds of the carbonate will yield 56 pounds of lime. This is the greatest quantity of pure lime that can be obtained from any limestone.

Next, by a careful analysis of 100 grains of pulverized oyster shells, it has been shown by Professor Rogers that they contain:

Carbonate of lime, - - -	95.18
Phosphate of lime, - - -	1.88
Silica, - - - - -	.40
Water, - - - - -	1.62
Insoluble animal matter, - - -	.45
Loss, &c. - - - - -	.47
	100.

If we attend only to the carbonate of lime, it is seen that 100 grains of an oyster shell contain 95 grains; or 100 pounds of shells will contain 95 pounds (leaving out the fractional numbers) of lime combined with carbonic acid, which, when burnt, will yield 53.4 pounds of lime. Here is the difference in quantity of lime furnished by the same weight of the two materials.

What now is the difference in quality? Besides carbonate of lime, the oyster shells have been found to contain *phosphate of lime*, silica, water, and insoluble animal matter, the whole amounting to 4.35 parts in a hundred. But the phosphate is an improvement to it—the fertilizing property of bones being in a great measure ascribed to the phosphoric acid, which they contain in combination with lime; the water is driven off as vapour; so that there remains 85 hundredths of impurities in the form of silica, or sand, and insoluble animal matter. Oyster shell lime differs therefore in purity from the alum lime by the 85 hundredths of a pound on every hundred pounds; and this is the precise difference in quality between them, supposing the alum limestone to be a perfectly pure carbonate of lime, which is seldom the case. But is the lime thrown into the market for agricultural uses always obtained from pure alum limestone? The following table exhibiting the analysis of ten specimens of limestone from Baltimore, Harford, and Frederick counties, from which the Maryland farmers derive their principal supply, will show that it is not.

Analyses of ten specimens of Limestone, from Baltimore, Harford, and Frederick counties.

	No 1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Carbonic acid	42.	46.	43.	43.	43.5.	39.	42.	47.	43.5.	41.
Lime,	54.	30.	55.	55	55.5.	49.	54.	31.	55.5.	29.
Magnesia	"	18	"	"	"	"	"	18.	"	17.
Silica	4.	6.	2.	2.	1.	11.	2.	2.	1.	9.
Undetermined	"	"	"	"	"	1.	2.	2.	"	"
Oxide of iron	"	"	"	"	"	"	"	"	"	4.
	100	100	100	100	100	100	100	100	100	100

It will be perceived that three out of ten are magnesian limestone; all of them contain more silica or sand than has been found in oyster shells, and one, said to be most extensively used in Harford county, contains as much as eleven per cent. of inert matter. It follows, therefore, that, as oyster shells are composed nearly of pure carbonate of lime, they will afford a lime containing scarcely an appreciable quantity of impurities. If well burnt, (which is the case when no effervescence is observed on treating them with a weak acid,) lime obtained from them may be deemed, with a fractional difference, equal, weight for weight, to the best stone lime; and as their chemical composition does not vary, there is nothing to be deducted from the value of the product in consequence of the impurities that exist, as exhibited by the foregoing table, in most limestones, and that must necessarily form a part of the residue when these are burnt.

If the comparative value of the two products be estimated by measure, a greater difference is discovered; but there is at the same time a disproportionate difference in price. A bushel of the best alum-lime weighs from ninety to a hundred pounds; whereas, the same bulk of shell lime, unground, weighs from sixty to seventy-five pounds, and perhaps when ground would weigh eighty pounds,—a difference of from 20 to 25 per cent. But the former costs from thirty to thirty-five cents at Baltimore, the most convenient

spot for its delivery on tide-water, where the latter can be had for ten cents; whilst farmers, conveniently situated on the bay side, might themselves burn the shells at an expense not exceeding six cents a bushel. These remarks refer to the lime obtained from recent or fresh oyster shells; but there is little or no difference between it and that procured by the burning of those contained in the Indian shell banks, provided proper care be taken to separate them from the black mould and dirt with which they are mixed.

It has been supposed, that because alum-lime has been found to admit of a greater admixture of sand than shell lime, in the making of mortar, it was to be inferred that it is correspondingly better, or, as it is termed, *stronger* for agricultural purposes. But this is an unwarrantable conclusion; for, as this circumstance seems to depend upon the peculiar aggregation among the particles of the lime, which prevents it from setting too rapidly, (or, in other words, attracting water and carbonic acid from the atmosphere sooner than the wants of the mason require,) it would appear, on the contrary, that, if any inference is to be drawn from it, it is adverse to the conclusion; whilst, on the other hand, the fact that shell lime sets very quickly, is favorable to the opinion, entertained by some persons, of its superior efficacy in agriculture,—it being generally understood that lime acts in the soil in the condition of carbonate of lime. Admitting, however, that the peculiar arrangement of the particles in stone lime which renders it in general coarser than the lime obtained from shells, may better fit it as a mechanical amendment to certain soils, the difference is at most as one to three, according to the datum upon which its superiority is predicated; namely, in the preparation of mortar, stone lime will bear three times as much sand as shell lime. But even in this respect the conclusion is not warranted, except perhaps in the case of a purely sandy soil, in which lime alone would, it is believed, prove of little service.

An effort was made, in the preceding Report, to bring into more general notice the laudable efforts of some citizens in Kent county, to extend the use of the lime obtained by burning the contents of those extensive accumulations that have now so frequently been alluded to, as occurring in numerous localities upon our tide-waters. The lime derived from this quarter, it has already been said, can be made nearly, if not quite equal, to that obtained from the fresh shells. It is, at all events, very far superior to most of the stone-lime recently introduced amongst the farmers of Maryland, from an adjoining State, and eagerly purchased at a reduced price. The following result of the analysis of a specimen of stone-lime from the Schuylkill, lately bought by a gentleman of Harford county, at fourteen cents a bushel, will serve to give an idea to what extent the farmer may be deceived in the purchase of articles of which he does not know the nature.

Analysis of a specimen of STONE LIME from the Schuylkill.

Lime, - - - - -	49.
Magnesia, - - - - -	24.
Carbonic acid, - - - - -	12.
Alumina, - - - - -	4.
Iron, - - - - -	1.5
Silica, - - - - -	.5

Water, - - -	7.
	100.

This article is so impure, that even had it been fully burned, it would have contained only about fifty-nine per cent. of lime; and yet many thousands of bushels of it have been purchased by farmers on tide-water, who might have supplied themselves with shell lime of infinitely superior quality, at less than two-thirds of the price. Shell lime of very good quality is burned at Worton point, at the mouth of Fairlee creek, and on the Chester river, in Kent county, which is advertised to be delivered any where within fifty miles at nine cents per bushel.

No direct experiments are known to have been made that would infer the conclusion to be drawn from the preceding statements; namely, that for agricultural purposes, there is scarcely an appreciable difference, weight for weight, between shell lime and stone lime of the best qualities.—Whilst, on the contrary, it is not at all improbable, that if any economical way could be devised of reducing the recent shells to powder, as effectually by mechanical means as by burning, they would be found, in consequence of the presence of phosphoric acid, to possess superior efficacy in the soil to the best alum-lime. At all events, enough is known of the nature of oyster shells, (and that of the clam is nearly alike) to cause them to be regarded as an abundant source of excellent lime. Any further delay, therefore, on the part of farmers living on the tide-waters of the Chesapeake bay, in employing them for the purpose of procuring and applying this essential deficiency in their soils, can only arise from a wilful disregard and neglect of the resources placed within their reach.

CULTIVATION OF VEGETABLES.

Artichoke.—This is a fine vegetable. It is perennial, a native of the south of Europe, and can be raised from seed sown early in April, or from young suckers slipped off the bottom of old plants in the spring. Plant these in rows four feet apart, placing them in clumps of three or four in each, two feet asunder in the rows. Artichokes require a deep soil, and before they are planted, the ground should be well manured, and trenched two feet deep: this operation should be performed in April, as soon as the young leaves begin to show themselves above the surface of the ground. After this, the plants will require only to be kept clear from weeds during the summer, and to be protected from frost.—*Lindley.*

The flower heads in an immature state, contain the part that is used, which is the fleshy receptacle, called the bottom, freed from the bristles and seed-down. When ready for cooking, soak them in cold water, wash them well, then put them into plenty of boiling water, with a handful of salt, and let them boil till they are tender, which will take from an hour and a half to two hours; trim them and let them drain on a sieve; serve up with melted butter.

Asparagus.—There are various methods pursued in forming new plantations of Asparagus: the most common one is to trench the ground from two to three feet deep, mixing with the soil

a good quantity of rotten dung. If the soil be good to the depth of three feet, it will not be necessary, under the ordinary culture, to prepare the ground deeper; but in doing this, a large portion of manure is necessary, and it will be requisite that it should be regularly mixed with the soil from the bottom of the trench to the top. If one of the quarters of the garden should be required for Asparagus alone, the whole ought to be trenched and manured as if it were for only one single bed, as the roots spread themselves in all directions, and by penetrating the alleys between the beds the outer rows of heads will always be finer than those in the middle. The ground being prepared, the beds should be set out of the width of five feet, with three feet alleys, fixing a strong stake at the corners of each bed, driven down to the depth of three feet. About the beginning or middle of April, proceed thus to plant the beds: strain a line round the four corners of the first bed, cut it down perpendicularly on the inside of the line to the depth of three inches, and take out the soil, which must be laid on the alleys on each side, levelling the surface perfectly even; but take care not to stand upon the bed; on the contrary, keep the soil as light as possible: mark out four lines, at a foot from each side of the bed, and a foot from each other: measure a foot from the end of the bed, and mark each line a foot apart, thus forming squares of twelve inches each way. Being now provided with some good one year old plants, (not more,) open the roots flat, place one plant on each of those places marked on the lines, and fasten it down with a handful of mould to keep it in its place: when this is done, the bed must be filled up level with the spade. This being finished, proceed with the other beds in like manner, till the whole is completed. A bed of twenty yards long, thus planted, will require 235 plants; and when of three years' standing, will furnish heads equal in size to these generally produced in our best gardens. If still larger heads than these should be desired, they may be produced by planting the four rows at fifteen inches between the plants in the row instead of twelve; and if this is done, it will be of greater advantage if the plants are placed in the *quincunx* manner; that is, by placing the first row of plants fifteen inches from the end, and fifteen inches apart; the second row twenty-two inches and a half from the end, and fifteen inches apart; the third row fifteen inches from the end, and fifteen apart; and the fourth row twenty-two inches and a half from the end, and fifteen inches apart. The plants will thus form rhomboidal squares, instead of rectangular ones. A bed thus planted will require 186 plants.—*Lindley.*

Asparagus is sometimes found in stony and gravelly situations, near the sea in England, and is very abundant in parts of Russia and Poland, where it is eaten by cattle as grass. It was a luxury among the Romans, and they had a large growing variety which required only three heads to weigh a pound. It is cultivated most extensively for the London markets; and it is said one grower alone has had eighty acres entirely under this crop: they raise it in great perfection, as five of their largest heads have weighed a pound.—The earliest asparagus brought to the New York market is grown at Coney Island, about nine miles from the city; the soil is formed almost

entirely of sea sand, a fresh coating of which is put on every season; an application of swamp earth is also found to promote the growth of asparagus; but though this plant grows naturally in poor sandy soil, it is found that the sweetness and tenderness of the shoots depend very much on the rapidity of their growth, which is greatly promoted by the richness of the soil.

The following directions for cooking asparagus may perhaps be useful to somebody.—Scrape the stalks clean, wash them in cold water, and tie them with bass or tape, into little bundles of about a dozen each; cut off the stalks at the bottom that they may be all of a length, leaving only just enough to serve as a bundle for the green part. Have a stew pan on the fire with a plenty of water; sprinkle in a handful of salt; let it boil and skim it: then put in the asparagus; when the stalk is tender, which will be in from twenty to thirty minutes, they are done enough. Great care must be taken to watch the exact time of their becoming tender; take them up just at that instant, and they will have their true flavor and color; a minute or two more boiling destroys both. Serve up with melted butter, or have it separate in a sauce-boat.—*Kitchener.*

The following notice of, and directions for sowing this fine grass, will be found interesting to such of our readers as may desire to make an experiment in its cultivation. We copy it from a circular of G. C. Thorburn, Esq.

LUCERNE, OR FRENCH CLOVER.

Few articles of foreign introduction have ever succeeded so well as this valuable Clover; many of the first agriculturists in our country have, and still continue to cultivate it with increasing success. We could give the most respectable names as references; but would merely mention J. Buel, Esq. of Albany, who has given it a fair trial, and is fully satisfied of its excellent properties, and great usefulness to the farmer; and V. Livingston, Esq. Greensburgh, N. Y. The following is from James Byrd, Esq. Flushing, Long Island, who has cultivated it for the last ten years. He has kindly communicated to us the result of his latest experience, which we recommend to the attention of all agriculturists. Mr. B. is well known as one of the best farmers on Long Island, and what is not a little creditable to his skill and horticultural abilities, he beat Cobbett completely during the Ruta Baga war a few years since. Mr. C. acknowledged that Mr. Byrd's mode of culture and returns exceeded his; and he was struck with admiration when viewing his well kept field, and the superior quality of his turnips.

FLUSHING 2 mo. 1834.

RESPECTED FRIENDS,

I now hand you a particular statement how I managed my Lucerne.

1831. I this spring sowed twenty pounds of seed on my wheat about the time clover is usually sown, and harrowed it both ways with a sharp heavy iron-tooth harrow. It came up well, and produced three good crops of hay the following year.

1832. Harrowed the lot three times over, and in order to see whether it proved injurious, I had part of it done six times over. I did not find that

it injured the plants, but it had this good effect, that it killed nearly all the weeds and natural grass, and was very beneficial to the Lucerne.

1833. Had it well harrowed again this spring, and had three good crops of hay. I weighed part of the first crop after it was well cured, and found it produced nearly two and a half tons per acre.

The harrow ought to be made in two parts, and hung together with hooks and eyes, it being much easier to clear them from grass than when made in the usual way, and, in my opinion, are much better for all purposes; it ought to be so constructed as for the teeth not to follow each other. Be careful to pick up the stones after every harrowing, and it would be well to harrow it after every mowing. Light, dry land is best for the grass. Unless the land is very level, I think it would be best to place it in ridges twenty feet wide. If sown in ridges, it must be harrowed the long way. The clover ought to be raised 8 or 10 inches above the harrow, in order that it may run level, otherwise it will injure the plants. I had mine made with notches, to regulate the height. I am convinced that the best way to prepare land for Lucerne is to plough in plenty of manure in the spring, and plant it with corn, having it well ploughed and hoed, so as to be kept perfectly clean. In the fall, after taking off the corn, sow wheat, manured with ashes.

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,		VIRGINIA.	
Branch at Baltimore, . . . do		Farmers Bank of Virginia, &c.	2 1/2
Other Branches, . . . do		Bank of Virginia, . . . do	2 1/2
MARYLAND.		Branch at Fredericksburg do	2 1/2
Banks in Baltimore, . . . par		Petersburg, . . . do	2 1/2
Hagerstown, 3/4		Norfolk, do	2 1/2
Frederick, do		Winchester, do	2 1/2
Westminster, do		Lynchburg, do	2 1/2
Farmers' Bank of Mary'd, do		Danville, do	2 1/2
Do. payable at Easton, . . do		Bank of the Valley, . . . do	2 1/2
Salisbury, 5 per ct. dis.		Branch at Romney, . . . 1	
Cumberland, 3/4		Do. Charlestown, . . do	2 1/2
Millington, do		Do. Leesburg, . . . do	2 1/2
DISTRICT.		Wheeling Banks, . . . 1 1/2	2
Washington, } Banks, 1/2		Ohio Banks, generally 2 1/2	3
Georgetown, } Banks, 1/2		New Jersey Banks gen. 1 1/2	2
Alexandria, } Banks, 1/2		New York City, . . . 1/2	2
PENNSYLVANIA.		New York State, . . . 2 1/2	3
Philadelphia, 1/2		Massachusetts, . . . 2 1/2	2
Chambersburg, 1/2		Connecticut, 2 1/2	2
Gettysburg, do		New Hampshire, . . 2 1/2	2
Pittsburg, 1 1/2		Maine, 2 1/2	2
York, 1 1/2		Rhode Island, . . . 2 1/2	2
Other Pennsylvania Bks. 1 1/2		North Carolina, . . 2 1/2	3
Delaware [under \$5], . . . 3/4		South Carolina, . . 2 1/2	3
Do. [over 5], 1/2		Georgia, 3/4	3
Michigan Banks, 5/8		New Orleans, 4	
Canadian do, 5/8			

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Notices—of the communication of Mr. John Smith—of do. of a Subscriber—of the Virginia Corn Crusher and Grinder—of a rail road from Boston to New Orleans—of four samples of American silk, and certain varieties of the mulberry—advice to mulberry culturists, together with directions for sowing the seed—communication of A Subscriber on the transplantation of trees—do. of John Smith, Esq., on the chinch-bug and the clover culture in Missouri—notice of John Barney's great coming sale of stock—continuation of Professor Ducaet's report, containing an interesting analysis and comparative view of the relative value of stone and oyster shell lime—cultivation of vegetables—viz. Artichoke and Asparagus—directions for the culture of Lucerne or French Clover—prices currents, advertisements, &c.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM.	TO.
BEANS, white field,	bushel.	—	—
CATTLE, on the hoof,	100lbs.	8 00	8 75
CORN, yellow,	bushel.	—	70
White,	"	68	69
COTTON, Virginia,	pound.	—	—
North Carolina,	"	—	—
Upland,	"	18	18 1/2
FEATHERS,	pound.	—	45
FLAXSEED,	bushel.	—	1 37
FLOUR & MEAL—Best wh. wh't fam	barrel.	7 75	8 25
Do. do. baker's,	"	7 50	8 00
Do. do. Superfine,	"	6 75	7 12
SuperHow. st. in good de'd	"	6 87	—
" wagon price,	"	6 75	—
City Mills, extra,	"	—	7 00
Do.	"	6 87	—
Susquehanna,	"	—	—
Rye,	"	—	—
Kiln-dried Meal, in hhds.	hhd.	—	—
do. in bbls.	bbl.	—	—
GRASS SEEDS, red Clover,	bushel.	—	5 25
Timothy (herds of the north)	"	—	—
Orchard,	"	none	—
Tall meadow Oat,	"	—	—
Herds, or red top,	"	—	—
HAY, in bulk,	ton.	18 00	20 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
HOGS, on the hoof,	100lbs.	9 00	9 25
Slaughtered,	"	—	—
Hops—first sort,	pound.	18	—
second,	"	16	—
refuse,	"	14	—
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,	"	—	—
OATS,	"	45	47
PEAS, red eye,	bushel.	—	—
Black eye,	"	—	—
Lady,	"	—	—
PLASTER PARIS, in the stone,	ton.	—	5 50
Ground,	barrel.	1 50	—
PALMA CHRISTA BEAN,	bushel.	—	—
RAGS,	pound.	3	4
RYE,	bushel.	90	92
Susquehanna,	"	92	—
TOBACCO, crop, common,	100 lbs	5 00	5 50
" brown and red,	"	5 00	7 00
" fine red,	"	—	9 00
" wrappery, suitable	"	—	—
" for segars,	"	5 00	10 00
" yellow and red,	"	6 00	8 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	4 75	5 00
" ground leaf,	"	5 00	8 00
Virginia,	"	7 00	14 00
Rappahannock,	"	—	—
Kentucky,	"	8 00	14 00
WHEAT, white,	bushel.	1 50	1 60
Red,	"	1 40	1 48
WHISKEY, 1st pf. in bbls.	gallon.	37	37 1/2
" in hhds.	"	36	—
" wagon price,	"	33	33 1/2
WAGON FREIGHTS, to Pittsburgh,	100 lbs	2 75	—
To Wheeling,	"	3 00	—
WOOL, Prime & Saxon Fleeces,	pound.	55 to 68	30 32
Full Merino,	"	48 55	28 30
Three fourths Merino,	"	45 48	26 28
One half do.	"	40 45	24 26
Common & one fourth Meri.	"	36 40	22 24
Pulled,	"	38 40	23 24

A GARDENER.

A person possessing a general knowledge of gardening in all its branches, and of farming, is desirous of obtaining a situation in the above capacity. He can give the best recommendation as to character and capacity—Address applications to W. B. through the editor of this paper. All applications by letter to be post paid.

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BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.	—	—
BACON, hams, new, Balt. cured,	pound.	15	17
Shoulders, . . . do.	"	12	—
Middlings, . . . do.	"	13	14
Assorted, country,	"	—	13 1/2
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,	"	20	22
CIDER,	barrel.	—	—
CALVES, three to six weeks old,	each.	4 50	6 00
Cows, new milch,	"	17 00	30 00
Dry,	"	8 00	12 00
CORN MEAL, for family use,	100lbs.	—	1 75
CHOP RYE,	"	—	1 87
EGGS,	dozen.	—	12
FISH, Shad, No. 1, Susquehanna,	barrel.	—	—
No. 2,	"	3 75	4 00
Herrings, salted, No. 1,	"	—	—
Mackerel, No. 2, 8 25a 50; No. 3	"	6 25	6 50
Cod, salted,	cwt.	3 00	3 25
LARD,	pound.	14	—

GREAT SALE OF STOCK BY AUCTION.

M. R. JOHN BARNEY, formerly of Fort Penn, Delaware, having given up his establishment at that place, intends selling all his stock thereon, remaining unsold, at public auction, on TUESDAY THE 5TH OF APRIL, NEXT. They consist of

First, upwards of 50 GENUINE BAKEWELL SHEEP. It has been the peculiar pride of Mr. Barney, for about thirty years to rear this animal in its greatest purity and perfection, and the unexampled success he has met with in securing the best prices in every market within his reach, is perhaps, the best evidence which could be asked to attest its superiority. The BAKEWELL sheep are so well known, and so universally admired for their length and quantity of fleece, and delicious quality of mutton, that it is superfluous to dwell upon their high claims to popular favor, and the confidence of judges. In the prosecution of this, his favorite pursuit, Mr. Barney has spared no pains nor money to effectuate his object. Regularly every two years he has imported a BAKEWELL Buck from England, which have always been selected by a confidential friend and competent judge. From one of those Bucks thus imported, we have a sample of wool nearly twelve inches in length, and which Buck is the sire of a part of his present flock, having sold him last summer for \$200 to General Garrard of Kentucky. Among the sheep which Mr. Barney will offer for sale on the 5th proximo, is an IMPORTED BAKEWELL BUCK, an animal which, when we saw him in October last, looked at a distance like a barrel enveloped in wool. In size, weight of fleece and beauty of form, he is equal to any thing of the kind we have ever seen.

Secondly, There are between 50 and 60 MILCH COWS and HEIFERS; most of which are of his own raising, and have had the advantage of his judgment in breeding. His object so far as the cow-kind are concerned, has always been to rear DEEP MILKERS with carcasses that would command a good price when cast off for slaughter. Among his present lot of cows, there are some that yield FIFTEEN to TWENTY, and in one instance, TWENTY-SIX quarts a day. These cows are judicious crosses of the Durham, Devon, Simms' and Girard breeds, all of imported origin and excellent families. The fame of the Durham cows for yielding full supplies of milk are too well known to need a remark; nor is the Simms' breed without high claims to pre-eminence as great milkers. Many of the cows have calves and others are in calf, most of them by a Durham bull of pure strain.

Besides these, there are several pair of EASTERN WORK OXEN, first rate and large size; two good BREEDING MARES in foal; several COLTS from 1 to 2 years old, and very promising; a number of BREEDING SOWS and PIGS. A Family Dearborn Wagon, gig, wagons, carts, ploughs and harrows.

ALSO

A fine thrashing machine of 4 horse-power, house-hold furniture, kitchen do., corn, wheat and rye by the bushel, and a crop of rye in the ground.

Terms made known at sale.

The editor of the Farmer and Gardener will attend the sale if encouragement offers, and will be happy to receive orders to purchase for any gentleman who may desire his agency.

March 22

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THE VIRGINIA CORN AND COB CRUSHER AND GRINDER.

THE subscriber having obtained a general privilege (and for certain territory an exclusive right) to make, use, and vend to others to be used, the Patent VIRGINIA CORN AND COB CRUSHER AND GRINDER, which was recently noticed in the Farmer and Gardener, is now manufacturing them, and will be prepared, in a few days to furnish this useful Machine, made in the best style.—Price \$60.

This Machine is constructed principally of cast-iron, is made in the most substantial and durable manner, and is not easily put out of order. With the application of a two horse-power, it is competent to reduce from 15 to 20 bushels of corn and cob to a suitable state to mix with cut straw, corn stalks, hay, or fodder, in an hour, and by hand-power, from 4 to 6 bushels an hour.

Those who have been accustomed to the feeding of stock need not be told, for they are already aware, that the advantages of such a Machine, on a large estate where many domestic animals are kept, are almost incalculable; and to those who have small establishments it will prove of great value, as, besides saving at least three-fifths of the feed, it will enable them to dispense with the necessity of sending their grain to mill to be chopped.

JAS. MOORE,
Maryland Agricultural Repository,
Light st. Baltimore.

100 Bushels seed potato oats—a choice article—
for sale by JAMES MOORE,
Light, near Pratt st.
Mh 22 at the Maryland Agricultural Repository.

FARMERS' REPOSITORY.

No. 36 W. Pratt-street, Baltimore, Jan. 25, 1830.

THE proprietor avails himself again of the commencement of a New Year, to express his grateful thanks to his numerous friends and customers for their kind and liberal support of his Agricultural Establishment, and is happy to say that his ceaseless exertions to accommodate the public, have not been without a corresponding encouragement from them, and with his present improvements and Machinery, he is able to manufacture his Agricultural Implements much better than formerly, and with greater facility, and hopes to merit continued patronage. He now presents to the public an article new in its construction, for grinding corn and cob for feeding horses and stock. To those who approve this mode of feeding, this machine is worthy their attention. Also, Corn Shellers to be worked by hand or horse-power. He has a variety of Straw Cutters; but his own patented Cylindrical Straw Cutter is not surpassed by any other implement of the kind in existence; he has recently made some improvements in their construction, which adds to their cost, and for which he has been obliged to add a trifling advance on the price of the small size:—his prices for them being as follows, viz:

11 inch Revolving Bottoms \$30, with extra pair of knives.	\$33
11 " Permanent Bottom 28, do do do	31
13 " Permanent Bottom 43, do do do	48
13 " Revolving Bottom 45, do do do	50
15 " Revolving Bottom 50, do do do	56
20 " Large size fitted for horse-power 80, do do	90

His variety of Ploughs embraces almost every description and size that are worthy of notice, from a small seed Plough to the large rail road Plough—Gideon Davis' Improved Ploughs in all their variety, with cast and wrought shares; these castings are now made on his own premises, of the best stock and with special care; a supply of them always on hand to sell separate from the ploughs when required. Ox Scrapers for levelling hills, &c.; common and patent Wheat Fans; Fox & Borland's spring concave Threshing Machines, large and small size, and portable horse powers for the latter; also one of Z. Booth's 2 horse Threshing Machines and stationary horse power for the same; Brown's vertical patent Wool Spinners, and Watson's patent Washing Machine, both very simple and useful machines for families; Harrows; double and single corn and tobacco Cultivators; superior grain Cradles; and a great variety of other farming implements of a prime quality, and all on reasonable terms, at wholesale and retail.

Likewise in store—Orchard Grass, Timothy, and Herds Grass Seed of superior quality.
mh 22—eo2m JONATHAN S. EASTMAN.



FIELD & GARDEN SEEDS, &c.

WARRANTED GROWTH, 1835.

THE subscriber has just received and is now opening a large and superior assortment of GARDEN and RARE FIELD seeds, growth 1835.

All those seeds which can be raised to advantage in this country, are saved by careful seed raisers at the Clairmont Seed Gardens, near this city. Seeds which are found necessary to import are principally from the south of Europe, where they become so well matured, that their vitality is preserved much longer than those obtained from the humid climate of England.

Of the endless variety of Cabbages, Lettuce, Peas, Beans, Cucumbers, &c., none are retained but such as are known to be truly excellent.

The most prominent seeds received, and in store, are 250 bushels Garden Peas of various sorts.
95 bushels Dwarf and Pole Beans.

2000 lbs. Cabbage Seeds. About 35 fine sorts, among which are the Scotch Early York, London Buttersea, Flat Dutch, Globe Savoy, Early Harvest, &c.

150 lbs. Cucumber seed, about 12 sorts, among which are Keene's Long Green, Long Green Turkey, &c.

1800 lbs. Radish seeds—principally of Short top Scarlet, Yellow and Red Turnip.

300 lbs. Beet and Mangel wurtzel seed.

50 lbs. Green Curled Borecole, or Scotch Kale, purple curled—blue curled, &c.

35 lbs. Cauliflower and Broccoli—best European sorts.

200 lbs. Carrot seed—for garden and field.

75 lbs. Lettuce seed—the curled Silecia, large white or Lazy, brown Dutch and Malta, are best sorts, the latter particularly fine for forcing.

270 lbs. Onion seed—several French and American sorts.

Also—Tart Rhubarb seed, Tomato, Egg plant, Squash, Black and Orange Salsify, Spinach, Peppers, Ockra, Flag Leek, Cress, Celery, Endive, &c.

FIELD SEED.

60 bush. English and Italian Rye grass seed.

50 do Green Sward grass, for yards, &c.

1,200 lbs. Scarlet Trefoil or clover, Trifolium incarnatum.

800 lbs. Lucerne or French clover.

50 bush. English and Poland oats.

250 lbs. Skinless or Huskless oats—new—great product.

150 bush. best English and American Early Potatoes

100 lbs. Gama Grass seed—this grass bears cutting every 15 days, and of course the product is immense.

50 bush. White and Yellow Field corn.

ROBERT SINCLAIR, Jr. Seedsman,
Light st. near Pratt.

THE SILK MANUAL.

JUST published and for sale by Sinclair & Moore and Robt. Sinclair, Jr., at the Maryland Agricultural Repository, Light near Pratt street, Baltimore, a complete Manual of the Silk Culture, in which plain instructions are laid down for the culture of the Mulberry, the feeding of the Silk worms, management of the cocoons, reeling, spinning and dyeing of the Silk. In fine, it is a perfect Manual, and comprises every department of the business. The rules are arranged in so plain and methodical a manner that every one can understand them, and by a very few hours attention become master of the business. It is clearly demonstrated in this Manual, that largely upwards of \$500 may be netted from an acre in the Culture; and it is a singular fact connected with the Mulberry as adapted to the making of Silk, that poor dry, sandy, or gravelly land suits it best, the fabric made from worms fed on leaves raised on such soil, being greatly superior in elasticity and richness of gloss to those grown on rich grounds.

Price—per copy, 50 cents.

Liberal discounts made to the trade.

RUFFLE OATS,

For seed, may be had at the Maryland Agricultural Repository, Light street, Baltimore, by application to mh 22 JAMES MOORE.

AGRICULTURAL IMPLEMENTS, GRASS SEEDS, &c.

JAMES MOORE, successor of Sinclair & Moore, Light street near Pratt, tenders his thanks to the agricultural community, for the liberal patronage heretofore afforded to the Maryland Agricultural Repository, and respectfully invites the attention of farmers and others, to his stock of articles now on hand, comprising a large assortment of PLOUGHS of the most approved patterns, both wrought and cast shears, and of sizes adapted to all the purposes of agriculture—also Hill side and double mould board ploughs.

Corn cultivators of different kinds, those with five wrought tines generally preferred: Harrows of different shapes and sizes.

Corn shellers, the usefulness of which has been fully attested, and the increased sales of the last year, together with the many impressions of their utility, by those who use them, give evidence of their excellence—price \$20. Subject to a discount of 5 per cent for cash payment.—Price from \$15 to \$30. Improved Wheat Fans, of different sizes.

Cylindrical Straw cutters, a superior article for cutting any kind of long forage, 20 inch boxes adapted to horse power, \$75—extra knives per set \$6. 14 inch box adapted to manual power \$45—extra knives \$5 per set. 11 inch box which has some recent improvements \$30—extra knives, \$3 per set. Common dutch straw cutters from \$5 to \$7 50.

Garden and Field Tools, such as spades, shovels, hedge shears, mattocks, grubbing hoes, pruning tools, and hoes in a variety of forms, &c. Cast steel axes, warranted, Wove wire for screens, fans, cellar windows, sales, &c. Cotton Gins made to order—Grain Cradles—Harvest tools in their season.

Machines for sowing clover seed, which distribute the seed with regularity over a space of 12 feet at a time.

Having an Iron Foundry attached to this establishment, extra castings for ploughs of all kinds, Threshing machines, Horse powers, Mill work, window weights, &c. can be furnished or made to order of the best quality and at moderate prices.

FIELD SEEDS.

Orchard grass, Herds grass, Tall meadow oat grass.—Timothy and Clover; also on hand a lot of Ruffe oats.—Buckwheat, Millet, Potato Oats, &c.

Retail sales mostly confined to town acceptances, or to cash for which a discount will be made on implements.

March 5th.

500,000 SILKWORM EGGS.

THE subscriber offers for sale 500,000 Silkworm Eggs low to close sales.

JAMES MOORE,
Agricultural Repository, Light, near Pratt st.
March 22.

A BROOD MARE FOR SALE.

A SUBSCRIBER in Virginia writes to us as follows:

"I have a considerable stock of Blood Horses on hand, which would allow me to spare a Brood Mare, by the celebrated Contention. Should any gentleman wish to breed from any of the imported or other horses in the south, it would afford a fine opportunity to purchase her and have her served before taking her to the north. She is young, has brought two colts, and can be accompanied by well authenticated testimonials of pedigree, as her sire is well known, and her dam was once owned by Col. Wm. R. Johnson."

Any person desirous of purchasing a Brood Mare of the above description, can be supplied by addressing a letter to the Editor of the Farmer and Gardener—post paid.
Feb. 16. 4t.

GAMA GRASS SEED.

JUST received, a fresh supply of Gama Grass Seed. This is the grass that bears cutting every 15 days for soiling, and every thirty days for hay, from the middle of May till frost, say till the middle of November, and has yielded at the rate of 64 tons to the acre under peculiarly favorable circumstances, and from an acre of which 30 tons may be calculated upon. The earlier it is sown in the spring the better.

ROBERT SINCLAIR, Jr.
Maryland Agricultural Repository, Light near Pratt street.
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